What is claimed is:

1. A light emitting device comprising:

a first n-type layer;

a first p-type layer;

a light emitting layer arranged so as to be interposed between said first n-type layer and said first p-type layer and having a strain generating a piezoelectric effect; and

a second n-type layer provided between at least said light emitting layer and said first p-type layer and having a wider bandgap than that of said light emitting layer,

a potential in said light emitting layer whose gradient is generated by said piezoelectric effect being higher on the side of said first n-type layer than that on the side of said first p-type layer.

2. The light emitting device according to claim 1, wherein

said first p-type layer comprises a first cladding layer, and

the bandgap of said second n-type layer is narrower than that of said first cladding layer.

3. The light emitting device according to claim 1,

wherein

a material composing said light emitting layer has a wurtzite structure.

4. The light emitting device according to claim 3, wherein

a principal plane of said light emitting layer is approximately perpendicular to a <0001> direction.

5. The light emitting device according to claim 1, wherein

a material composing said light emitting layer has a zinc-blende structure.

6. The light emitting device according to claim 5, wherein

a principal plane of said light emitting layer is approximately perpendicular to a <111> direction.

7. The light emitting device according to claim 1, wherein

said strain generating a piezoelectric effect includes a strain for compressing said light emitting layer in an in-plane direction of said light emitting layer.

8. The light emitting device according to claim 1, wherein

said strain generating a piezoelectric effect includes a strain for extending said light emitting layer in an in-plane direction of said light emitting layer.

9. The light emitting device according to claim 1, wherein

a material composing said light emitting layer is a III-V group compound semiconductor.

10. The light emitting device according to claim 9, wherein

said III-V group compound semiconductor is a nitride based semiconductor including at least one of boron, gallium, aluminum, and indium.

11. The light emitting device according to claim 1, wherein

a material composing said light emitting layer is a II-VI group compound semiconductor or a I-VII group compound semiconductor.

12. The light emitting device according to claim 1, wherein

said light emitting layer has a quantum well structure comprising one or more well layers having a strain generating a piezoelectric effect and two or more barrier layers arranged so as to interpose said well layer therebetween, and

the potential in said well layer whose gradient is generated by said piezoelectric effect is higher on the side of said first n-type layer than that on the side of said first p-type layer.

13. The light emitting device according to claim 12, wherein

acceptor levels and/or donor levels are nonuniformly formed in the light emitting layer having said quantum well structure in order to decrease a potential gradient generated by the piezoelectric effect in the direction of confinement in said quantum well structure.

14. The light emitting device according to claim 13, wherein

in said well layer, more acceptor levels are formed in its portion on the side of said first n-type layer having a higher potential generated as a result of the piezoelectric effect than those in its portion on the side of said first p-type layer having a lower potential.

15. The light emitting device according to claim 13, wherein

in said well layer, more donor levels are formed in its portion on the side of said first p-type layer having a lower potential generated as a result of the piezoelectric effect than those in its portion on the side of said first n-type layer having a higher potential.

16. The light emitting device according to claim 13, wherein

in said barrier layer, more acceptor levels are formed in its portion in contact with an interface of said well layer on the side of said first n-type layer having a higher potential generated as a result of the piezoelectric effect than those in its portion in contact with an interface of said well layer on the side of said first p-type layer having a lower potential.

17. The light emitting device according to claim 13, wherein

in said barrier layer, more donor levels are formed in its portion in contact with an interface of said well layer on the side of said first p-type layer having a lower potential generated as a result of the piezoelectric effect than those in its portion in contact with an interface of said

well layer on the side of said first n-type layer having a higher potential.

18. The light emitting device according to claim 13, wherein

both the acceptor levels and the donor levels are formed in the light emitting layer having said quantum well structure.

19. The light emitting device according to claim 18, wherein

the concentration of said acceptor levels and the concentration of said donor levels are approximately equal to each other.

20. A light emitting device comprising:

a first n-type layer;

a first p-type layer;

a light emitting layer arranged so as to be interposed between said first n-type layer and said first p-type layer and having a strain generating a piezoelectric effect; and

a second p-type layer provided between at least said light emitting layer and said first n-type layer and having a wider bandgap than that of said light emitting layer,

a potential in said light emitting layer whose gradient

is generated by said piezoelectric effect being higher on the side of said first n-type layer than that on the side of said first p-type layer.

21. The light emitting device according to claim 20, wherein

said first n-type layer comprises a second cladding layer, and

the bandgap of said second p-type layer is narrower than that of said second cladding layer.

22. The light emitting device according to claim 20, wherein

a material composing said light emitting layer has a wurtzite structure.

23. The light emitting device according to claim 22, wherein

a principal plane of said light emitting layer is approximately perpendicular to a <0001> direction.

24. The light emitting device according to claim 20, wherein

a material composing said light emitting layer has a zinc-blende structure.

25. The light emitting device according to claim 24, wherein

a principal plane of said light emitting layer is approximately perpendicular to a <111> direction.

26. The light emitting device according to claim 20, wherein

said strain generating a piezoelectric effect includes a strain for compressing said light emitting layer in an in-plane direction of said light emitting layer.

27. The light emitting device according to claim 20, wherein

said strain generating a piezoelectric effect includes a strain for extending said light emitting layer in an in-plane direction of said light emitting layer.

28. The light emitting device according to claim 20, wherein

a material composing said light emitting layer is a III-V group compound semiconductor.

29. The light emitting device according to claim 28, wherein

said III-V group compound semiconductor is a nitride based semiconductor including at least one of boron, gallium, aluminum, and indium.

30. The light emitting device according to claim 20, wherein

a material composing said light emitting layer is a II-VI group compound semiconductor or a I-VII group compound semiconductor.

31. The light emitting device according to claim 20, wherein

said light emitting layer has a quantum well structure comprising one or more well layers having a strain generating a piezoelectric effect and two or more barrier layers arranged so as to interpose said well layer therebetween, and

a potential in said well layer whose gradient is generated by said piezoelectric effect is higher on the side of said first n-type layer than that on the side of said first p-type layer.

32. The light emitting device according to claim 31, wherein

acceptor levels and/or donor levels are nonuniformly formed in the light emitting layer having said quantum well

structure in order to decrease a potential gradient generated by the piezoelectric effect in the direction of confinement in said quantum well structure.

33. The light emitting device according to claim 32, wherein

in said well layer, more acceptor levels are formed in its portion on the side of said first n-type layer having a higher potential generated as a result of the piezoelectric effect than those in its portion on the side of said first p-type layer having a lower potential.

34. The light emitting device according to claim 32, wherein

in said well layer, more donor levels are formed in its portion on the side of said first p-type layer having a lower potential generated as a result of the piezoelectric effect than those in its portion on the side of said first n-type layer having a higher potential.

35. The light emitting device according to claim 32, wherein

in said well layer, more acceptor levels are formed in its portion in contact with an interface of said well layer on the side of said first n-type layer having a higher

potential generated as a result of the piezoelectric effect than those in its portion in contact with an interface of said well layer on the side of said first p-type layer having a lower potential.

36. The light emitting device according to claim 32, wherein

in said barrier layer, more donor levels are formed in its portion in contact with an interface of said well layer on the side of said first p-type layer having a lower potential generated as a result of the piezoelectric effect than those in its portion in contact with an interface of said well layer on the side of said first n-type layer having a higher potential.

37. The light emitting device according to claim 32, wherein

both the acceptor levels and the donor levels are formed in the light emitting layer having said quantum well structure.

38. The light emitting device according to claim 37, wherein

the concentration of said acceptor levels and the concentration of said donor levels are approximately equal

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to each other.